

Brandywine Pumping Station, 1904
19th and Market Streets
Wilmington
New Castle County
Delaware

HAER DE-19

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2-WILM,
38-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

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HAER, DEL, 2-WILM, 38 -

HISTORIC AMERICAN ENGINEERING RECORD

Brandywine (Pumping) Station
(With Holly triple-expansion engines)

DE-19

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| Location: | Brandywine Pumping Station is located at 16th and Market Streets in Wilmington, Newcastle County, Delaware. UTM: 18.453450.4399880 |
| Date of Construction: | 1904-1907 |
| Present Owner: | City of Wilmington, Delaware. |
| Present Use: | Still functions as part of Wilmington's water supply system, although none of the original pumping machinery is used. |
| Significance: | It has historically been difficult for American cities to meet the ever-increasing demands of their citizens for water. The Brandywine Station represents an attempt made by one major city in the early 20th century to upgrade its water service. |
| Historian: | Data provided by Christopher Derganc. 1976 |

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Just after 1900, Wilmington, Delaware initiated a number of major improvements to its water supply system. It entered contracts for laying new mains and for constructing a reservoir, water towers, and a sand filter plant. In 1904, it also awarded a contract (\$56,900) to the A. S. Reed and Brother Company to construct a pumping station at 16th and Market Streets on the Brandywine Creek. [Photos DE-19-1, 2]

A contemporary account described the new Brandywine (pumping) Station:

The pumping station will be on Sixteenth Street where there will be handsome pillars and pilasters of Brandywine granite. The four columns will be 17 feet high and 2 feet in diameter while the pilasters will be 9 feet, 10 inches high. The trimmings over the arches, windows and entrance will be of Brandywine granite.

There will be considerable steel used in the building and the walls will be of pressed gray brick, the quoin bricks being darker, while the upper parts of the wall will be porcelain faced brick. Kittaning brick is to be used in the cellar walls. The floors will be concrete and the roof clay tile. The ventilators will be copper while much terra cotta will be used for the cornices and other places. The windows will be double hung and the transoms fixed.

The building will have the best of electric and gas lightings. [1]

The building was completed in 1906. Its interior measured 110 by 60 feet; the walls were 21 inches thick. The station housed two vertical Holly steam pumping engines put into service in January 1908. These vertical, triple-expansion, non-condensing engines were purchased from the Holly Manufacturing Company of Buffalo, New York for \$80,000. The twin engines carried serial numbers 580 and 581. Each 550 h.p. engine weighed approximately 500 tons and had a capacity of 12 million gallons per day. The engines ran at 20 to 24 revolutions per minute, and pumped 340 gallons per revolution. [Photos DE-19-3, 4 & 5] The steam to drive the engines came from four 300 horsepower boilers manufactured by the Edge Moor Iron Company. [Photo DE-19-6]

The pumping plant drew water from the Brandywine, which was delivered to the station in a race. The water was pumped through 42-inch force mains to the Porter Reservoir, located two miles away on Concord Pike.

The engines remained in service for approximately 60 years. In 1976, one had been removed and the other, although nearly in working condition, was no longer used.

SOURCES

Wilmington Board of Trade Journal, April 1904. p. 12.

Wilmington Water Department, Annual Report, January 1908.